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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,684	04/15/2004	Ryan James Berg	286685.126US1	8075
23483 7590 04/19/2007 WILMER CUTLER PICKERING HALE AND DORR LLP 60 STATE STREET BOSTON, MA 02109			EXAMINER TRUONG, THANHNGA B	
			ART UNIT 2135	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/19/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/19/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

teresa.carvalho@wilmerhale.com
tina.dougal@wilmerhale.com
michael.mathewson@wilmerhale.com

Office Action Summary	Application No.	Applicant(s)	
	10/824,684	BERG ET AL.	
	Examiner	Art Unit	
	Thanhnga B. Truong	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Thanhnga B. Truong
AU2135

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/10/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the communication filed on April 15, 2004. Claims 1-5 are pending. At this time, claims 1-5 are rejected.

Information Disclosure Statement

2. The information disclosure statement (IDS) filed on November 10, 2005. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Figures 12 and 13 do not include labels and reference numbers that describes in the specification (see paragraph 0010 of the specification). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: Paragraph 0010 of the specification recites reference numbers that does not include in the drawings (see Figures 12 and 13 of the specification). Appropriate correction is required.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to

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prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-5 provisionally are rejected on the ground of nonstatutory double patenting over claims 1-5 of copending Application No. 10/824,865. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

Claims 1-5 provisionally are also rejected on the ground of nonstatutory double patenting over claims 1, 13, 16, and 17 of copending Application No. 10/825,007. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on

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that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

Claims 1-5 recites the claimed language that is similar to those of claims 1-5 of Application No. 10/824,865.

In addition, claims 1-5 recites the claimed language that is similar to those of claims 1, 13, 16, and 17 of Application No. 10/825,007.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1-5 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

a. *Referring to claims 1-5:*

Claims 1 and 4 recite "a method and a system for detecting vulnerabilities in source code." These claims are clearly directed toward a software program and they are non-statutory as not being tangibly embodied in a manner so as to be executable. Furthermore, Figure 13 and paragraph 0010 of the specification clearly disclose the computer programs being analyzing to detect the vulnerabilities such as buffer overflow, race conditions and privilege escalation. Therefore, claims 1 and 4 recite a non-statutory subject matter.

Claims 2-3 and 5 are depended on claims 1 and 4 respectively, thus they are rejected with the same rationale applied against claims 1 and 4 above.

Claim Rejections - 35 USC § 102

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9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Viegas et al., "ITS4: A Static Vulnerabilities Scanner for C and C++ Code," 2000.

a. Referring to claim 1:

i. Viegas teaches a method of detecting vulnerabilities in source code comprising:

(1) generating a model which describes certain characteristics about the actions to be performed in a routine (**see section 4.1 of Viegas**), and

(2) using the model in conjunction with pre-specified criteria for the corresponding routine to determine whether the routine possesses vulnerabilities which could enable actions in the routine to be performed outside of the intended design (**see column 4 of section 1, 4.4, and 4.5 of Viegas**).

b. Referring to claim 2:

i. Viegas further teaches:

(1) wherein the vulnerabilities are privilege escalations (**see column 4 of section 1 of Viegas**).

c. Referring to claim 3:

i. Viegas further teaches:

(1) wherein the pre-specified criteria for the corresponding routine includes rules about the semantic behavior of the routine (**see 4.1 and section 4.4.1**).

d. Referring to claim 4:

i. This claim consist a system for detecting vulnerabilities in source code to implement claim 1, thus it is rejected with the same rationale applied against claim 11 above.

e. Referring to claim 5:

i. Viega further teaches:

(1) wherein the computed implemented logic for using the model in conjunction with pre-specified criteria for the corresponding routine to determine whether the routine possesses vulnerabilities which could enable actions in the routine to be performed outside of the intended design includes a database specifying rules to detect vulnerabilities based on an analysis of the models (**see 4.2 of Viega**).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. O'Brien et al (US 6,654,782) discloses a system and method for dynamically processing a network event using an action set in a distributed computing environment (see abstract).

b. Flowers et al (US 7,073,198) discloses a system and method in accordance with the invention reliably and non-intrusively identifies various conditions of a network (see abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanhnga (Tanya) Truong whose telephone number is 571-272-3858.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached at 571-272-3859. The fax and phone numbers for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

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Charlene B. Py
AU2135

TBT

April 13, 2007